What Is Claimed Is:

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- 1. An infection management system, comprising:
 - a catheter with a lumen extending therethrough;
 - a side-arm tube extending laterally from a side of the catheter, wherein

the side-arm tube is located in a region of the catheter which remains outside a patient's body, and

a lumen through the side-arm tube communicates with the catheter lumen;

a one-way valve which prevents fluid flow from the catheter lumen through the sidearm tube lumen without preventing fluid flow through the catheter lumen; and

an antimicrobial agent-bearing intervention device configured to be inserted through the side-arm tube lumen and the one-way valve into the catheter lumen.

- 2. The infection management system of claim 1, wherein
- the catheter comprises a catheter body and an extension joined to a proximal end of
 the catheter body, the extension having a lumen extending longitudinally therethrough and in
 communication with the catheter lumen, and

the side-arm tube extends laterally from the catheter extension.

- The infection management system of claim 1, wherein
 the antimicrobial agent-bearing intervention device comprises an antimicrobial agent-bearing rod.
 - 4. The infection management system of claim 3, wherein the antimicrobial agent-bearing rod comprises a flexible polymer rod.
 - 5. The infection management system of claim 1, wherein the antimicrobial agent is iodine.
 - 6. The infection management system of claim 1, wherein

a region of the catheter to be located within the patient's body comprises a material which permits passage of an antimicrobial agent released from the antimicrobial agent-bearing intervention device from the catheter lumen to an outer surface of the catheter.

- 5 7. The infection management system of claim 3, further comprising:
 - a cap, wherein the antimicrobial agent-bearing rod is affixed to the cap, and the cap is adapted to seal a proximal end of the side-arm tube after the antimicrobial agent-bearing rod is inserted into the catheter lumen.
- 10 8. The infection management system of claim 7, wherein the cap has a threaded portion that cooperates with a threaded portion on the side-arm tube.
- The infection management system of claim 7, wherein
 the cap is a stopper sized to frictionally engage and seal the proximal end of the side-arm tube.
 - 10. An infection management method, comprising the steps of:

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- providing a catheter with a lumen extending therethrough, a side-arm tube extending laterally from a side of the catheter, wherein the side-arm tube is located in a region of the catheter which remains outside a patient's body and a lumen through the side-arm tube communicates with the catheter lumen, and a one-way valve located to prevent fluid flow from the catheter lumen through the side-arm tube lumen without preventing fluid flow through the catheter lumen; and
- inserting an antimicrobial agent-bearing intervention device through the side-arm tube and the one-way valve into the catheter lumen.
 - 11. The infection management method of claim 10, wherein the catheter comprises a catheter body and an extension joined to a proximal end of the catheter body, the extension having a lumen extending longitudinally therethrough and in communication with the catheter lumen, and

the side-arm tube extends laterally from the catheter extension.

- 12. The infection management method of claim 10, wherein the antimicrobial agent-bearing intervention device comprises an antimicrobial agent-bearing rod.
 - 13. The infection management method of claim 12, wherein the antimicrobial agent-bearing rod comprises a flexible polymer rod.
- 10 14. The infection management method of claim 10, wherein the antimicrobial agent is iodine.

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- The infection management method of claim 10, wherein

 a region of the catheter to be located within the patient's body comprises a material

 which permits passage of antimicrobial agent released from the antimicrobial agent-bearing intervention device from the catheter lumen to an outer surface of the catheter.
- 16. The infection management method of claim 10, further comprising:

 a cap, wherein the antimicrobial agent-bearing rod is affixed to the cap, and the cap is

 20 adapted to seal a proximal end of the side-arm tube after the antimicrobial agent-bearing rod is inserted into the catheter lumen.
- 17. The infection management method of claim 16, wherein the cap has a threaded portion that cooperates with a threaded portion on the side-arm
 25 tube.
 - 18. The infection management method of claim 16, wherein the cap is a stopper sized to frictionally engage and seal the proximal end of the side-arm tube.

19. An anti-infection catheter, comprising

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- a main catheter tube with a lumen extending therethrough;
- a side-arm tube extending laterally from a side of the main catheter tube, wherein the side-arm tube is located in a region of the catheter which remains outside a patient's body, and
 - a lumen through the side-arm tube communicates with the lumen of the main catheter tube;

a one-way valve adapted to permit passage of an antimicrobial agent-bearing intervention device between the side-arm tube lumen and the main catheter tube lumen while preventing fluid flow from the main catheter tube lumen through the side-arm tube lumen, wherein the one-way valve does not prevent fluid flow through the main catheter tube lumen.

- The anti-infection catheter of claim 21, wherein the main catheter tube comprises a catheter body and an extension joined to a
 proximal end of the catheter body, and
 - the side-arm tube extends laterally from the catheter extension.